[0022] The limit disk (12) is mounted around the combination shaft (113), abuts the flange (111) and has an outer edge, a central keyhole (121) and a positive stop (122). The positive stop (122) is formed on the outer edge.

[0023] The pivot pin bracket (14) is L-shaped, is mounted around the combination shaft (111), abuts the limit disk (12) and has a transverse leg, a longitudinal leg, two optional positive stops (141), two optional notches (142), a central circular hole (143) and two optional fastening holes (144). The transverse leg has an outer edge. The positive stops (141) are formed on the outer edge of the transverse leg diametrically opposite to each other, and abut the positive stop (122) on the limit disk (12) to keep the keyed pivot pin (11) from pivoting further. The notches (142) are formed between the positive stops (141) and the longitudinal leg. The central circular hole (143) is formed in the transverse leg. The fastening holes (144) are formed in the longitudinal leg.

[0024] The tilt hinge bracket (13) is L-shaped, is attached to the pivot pin bracket (14) and has a longitudinal leg, a transverse leg, a through hole (131), two keyholes (132), two detents (133), two optional fastening holes (134), a mounting hole (135) and a rotating element (136). The longitudinal leg has an inside surface and an outside surface. The through hole (131) is formed in the longitudinal leg. The keyholes (132) are formed around the through hole (131). The detents (133) are formed diametrically opposite to each other in the inside surface of the longitudinal leg around the through hole (131). The fastening holes (134) are formed in the longitudinal leg so the fastening elements (40) can pass through the fastening holes (134, 144) and attach the tilt hinge bracket (13) to the pivot pin bracket (14). The mounting hole (135) is formed in the transverse leg. The rotating element (136) is mounted in the mounting hole (135) and is mounted rotatablely in the cover (50).

[0025] With further reference to **FIG. 4**, the rotating positioning element (15) is mounted rotatably around the combination shaft (113), abuts the transverse leg of the pivot pin bracket (14) and has an outer edge, an outside surface, an inside surface, a central circular hole (151), two optional mounting tabs (152), a first protrusion (153) and a second protrusion (154). The outside surface abuts the transverse leg of the pivot pin bracket (14). The central circular hole (151) has a center. The mounting tabs (152) are formed on the outer edge of the rotating positioning element (15) and correspond to and are mounted respectively in the notches (142). The first and second protrusions (153, 154) are formed concentrically on the inside surface around the central circular hole (151) and are not symmetrical with each other. Each of the first and second protrusions (153, 154) has two inclined ends. The first and second protrusions (153, 154) have respectively a distance from the center of the central circular hole (151). The distance between the first protrusion (153) and the center of the central circular hole (151) is different from the distance between the second protrusion (154) and the center of the central circular hole (151).

[0026] With further reference to **FIG. 5**, the stationary positioning element (16) is mounted on the combination shaft (113), abuts the inside surface of the rotating positioning element (15) and has an inside surface, an outside surface, a central keyed hole (161), a first detent (162), a second detent (163), a third detent (164) and a forth detent (165). The first, second, third and forth detents (161, 162, 163, 164) are formed around the central keyed hole (161). The first and third detents (162, 164) selectively correspond to the first protrusion (153) on the rotating positioning element (15). The second and forth detents (163, 165) selectively correspond to the second protrusion (154) on the rotating positioning element (15). The first and second detents (162, 163) are formed to simultaneously engage the first and second protrusions (153, 154) when the cover (50) is open. The third and forth detents (164, 165) are formed to simultaneously engage the first and second protrusions (153, 154) when the cover (50) is closed.

[0027] The biasing assembly (17) is mounted rotatably around the combination shaft (113), abuts the outside surface of the stationary positioning element (16) and has a central hole (171).

[0028] The washer (18) is mounted around the combination shaft (113), abuts the biasing assembly (17) and has a central hole (181).

[0029] The fastener (19) is attached to the combination shaft (113), sequentially holds the washer (18), the biasing member (17), the stationary positioning element (16), the rotating positioning element (15), the pivot pin bracket (14) and the limit disk (12) on the combination shaft (113).

[0030] The offset hinge (20) is mounted in the base (60), is used to pivot the cover (50) until the outside surface of the cover (50) abuts the bottom surface of the base (60) and comprises a keyed pivot pin (21), an optional limit disk (22), a pivot pin bracket (24), an offset hinge bracket (23), a rotating positioning element (25), a stationary positioning element (26), a biasing assembly (27), an optional washer (28) and a fastener (29).

[0031] The keyed pivot pin (21) is mounted in the base (60) and has an outside end, an inside end, a head (212), a combination shaft (213) and a flange (211). The head (212) is formed on the outside end. The combination shaft (213) is formed on the inside end coaxially with the head (212). The flange (211) is formed between the head (212) and the combination shaft (213).

[0032] With further reference to **FIG. 3**, the limit disk (22) is mounted around the combination shaft (213), abuts the flange (211) and has an outer edge, a central keyhole (221) and a positive stop (222). The positive stop (222) is formed on the outer edge.

[0033] The pivot pin bracket (24) is L-shaped, is mounted around the combination shaft (211), abuts the limit disk (22) and has a transverse leg, a longitudinal leg, two optional positive stops (241), two optional notches (242), a central circular hole (243) and two optional fastening holes (244). The transverse leg has an outer edge. The positive stops (241) are formed on the outer edge of the transverse leg diametrically opposite to each other, and abut the positive stop (222) on the limit disk (22) to keep the keyed pivot pin (21) from pivoting further. The notches (242) are formed between the positive stops (241) and the longitudinal leg. The central circular hole (243) is formed in the transverse leg. The fastening holes (244) are formed in the longitudinal leg.

[0034] The offset hinge bracket (23) is L-shaped, is attached to the pivot pin bracket (24) and has a longitudinal